



A-20,000

Vapor Emission for On-Grade Slabs

Description

This specification includes application procedures, which significantly reduce levels of moisture emissions through concrete slabs on grade or below grade. The system consists of 4 components: **A-2250 Concrete Penetrating Sealer, A-900 Waterproofing Basecoat, W-8000 Wall Stamp Primer and A-8100 Waterproofing Primer.**

Surface Preparation

Surface Preparation of Existing Coated Floors

Remove all existing coatings, sealers, curing agents and other foreign materials by shot blast or grinding equipment in order to reveal porous concrete. Remove the contaminated materials and dispose in an approved disposal site.

Surface Cleaning

Clean and etch the floor with **A-100 Degreaser** to remove dirt, grease and oil from the surface. Apply with a stiff broom and agitate on concrete. Let set for 30 minutes then rinse with water. Then power wash to ensure all residue from the degreaser is removed.

Surface Stabilization (with A-2250 Concrete Penetrating Sealer)

Apply two applications of **A-2250 Concrete Penetrating Sealer** to increase concrete strength and reduce vapor transmission. Apply 2 applications of **A-2250 Concrete Penetrating Sealer** over the entire surface using a low-pressure sprayer. Saturate the surface – spraying evenly – but do not allow the material to puddle. Wait 24 hours before applying any **Americrete** cementitious coating.

Note: If efflorescence is present, remove with water and allow to dry for 24 hours.

If efflorescence continues, repeat this step. Continue only if efflorescence is not present.

Crack Repair

See Americrete's **A-17,000 Crack Repair Specification** for complete instructions.

Filling Spalls and Voids

The surface may require filling or patching prior to surfacing. Prime the surface with **A-8100 Waterproofing Primer** and pre-fill any low, voids or spalled areas with a mixture of 1 quart of **W-8000 Wall Stamp Primer** to one bag of **A-900 Concrete Resurfacer**. The proper mix design will be determined by the depth of the repair. Larger aggregate may need to be added for deep spalls and voids. Feather all edges to match adjacent grades with a damp brush or trowel.

Application procedures will vary according to the job, but a typical application outline would consist of the following:

1. Follow surface preparation (grinding, bead-blasting, etc.) to open the pores of the concrete substrate.
2. Follow surface stabilization by applying 2 coats of **A-2250 Concrete Penetrating Sealer** (do not allow **A-2250 Concrete Penetrating Sealer** to puddle). Allow to dry for 24 hours.
3. Dampen surface with water and prime surface with **A-8100 Waterproofing Primer** directly to concrete substrate at a rate of 200 square feet per gallon; this can be applied by roller. While **A-8100 Waterproofing Primer** is wet, apply a mixture consisting of one quart of **W-8000 Waterproofing Concentrate** to one bag of **A-900 Waterproofing Basecoat** at a rate of 150 to 200 square feet per bag.
4. Repeat primer and application of **A-900 Waterproofing Basecoat**.

Note: 2 applications are mandatory.

NOTE: IF VAPOR TRANSMISSION PERSISTS, FOLLOW STEP NUMBERS ONE THROUGH THREE ABOVE UNTIL VAPOR TRANSMISSION IS AT AN ACCEPTABLE LEVEL FOR THE COATINGS THAT ARE TO BE APPLIED. ACCEPTABLE LEVEL IS 4 LBS. PER SQUARE FOOT OR BELOW.

Follow-up Testing

After the complete system has been installed, test the vapor transmission rate of the floor to determine if the floor meets the manufacturer's standards for the particular flooring finish that will be used. Examples of flooring finishes are tile, vinyl tile, carpet, urethane and epoxy floors. All manufacturers have thresholds for vapor transmission rates at which their products experience delamination. This specification is designed to bring floors within acceptable limits for vapor transmission.

Note: While this system has had considerable success in significant reduction of moisture vapor emissions through concrete (as high as 85% reduction), it is not represented as a cure-all for problem slabs. The ideal solution for many slabs is to rip out and replace the slab. When this is not

possible or is not cost effective, this system offers a possible alternative. Actual results will vary depending on many different factors such as location, climate, engineering, sub-grade, construction practices, mix design, etc.

Product Warranty:

Americrete, Inc. blends its products to the highest quality. Warranty does not apply to any persons, company or private individuals who have not attended an Americrete, Inc. training class and/or have not been approved as a Certified Applicator of Americrete, Inc. products. This warranty is limited to the replacement of material (product) for a period of 1 year for single product application and for a period of 5 years for entire system application only if the maintenance has been performed as stated above and the product(s) have been proven to be defective. Product must be applied to manufacturers specifications, and over a sound substrate. There is no warranty for cracking, damage to substrates or replacement of any tangible items. This warranty, dated October 2004, supercedes all previous warranties.

Note: Americrete products are to be applied only when surface temperatures are at 55 degrees or higher. Do not apply when rain or other precipitation is expected within 24 hours.